

ABSORBENT ARTICLE WITH HIGHLIGHTED ACTIVE BARRIERS

BACKGROUND

[0001] The present disclosure relates to absorbent articles that include a leakage prevention element. More specifically, the disclosure relates to an absorbent article such as feminine care products, incontinence products, and training pants that can provide both a barrier to potential leakage from the absorbent article and a noticeable physical sensation when the absorbent article is reaching fullness.

[0002] Absorbent articles such as feminine care products, incontinence products, and training pants are useful to absorb and contain body wastes. These products have developed to the extent that body exudates are quickly drawn and retained away from the wearer's skin so that the wearer remains relatively dry and comfortable. Although this improved performance enhances wearer dryness and comfort, it can reduce the wearer's ability to notice or recognize when the article is becoming full, especially if the wearer's attention is distracted by an activity. In one example, incontinence and feminine care product wearers are very concerned about leakage in public. Some wearers can be so bothered by leakage that if it occurs in a public place, they will avoid that place and situation for the rest of their life. Similar circumstances can apply to training pants and other disposable absorbent articles as well.

[0003] This application teaches products and methods to provide notice to a wearer that an active barrier is working to provide the wearer with confidence that leakage will not occur.

SUMMARY

[0004] In response to the discussed deficiencies in the prior art, a new absorbent article has been developed. Absorbent articles of the present disclosure provide an active barrier against leakage, a physical sensation upon contact with urine or other body exudates, and a visual indication that the active barrier is working. As a result, the wearer or caregiver will notice distinct physical and visual sensations to assist the wearer or caregiver in recognizing when the absorbent article is nearing fullness.

[0005] In many cases, various elements of the articles described herein are white or otherwise uniform in their appearance and therefore difficult to differentiate. During use, even an active barrier can be difficult for a wearer or caregiver to recognize because of little color differentiation from the surrounding materials. Providing a highlighted region in the form of a barrier highlight that changes appearance under generally the same conditions that cause the active barrier to change dimensions provides a visual confirmation of and therefore confidence in product functionality. Consumers are thereby aware of the functional elements in the products and have a greater awareness of and confidence in the product performing as designed.

[0006] In one aspect of the present disclosure, an absorbent article for preventing leakage of a liquid insult includes an outer cover, a liner, and an absorbent assembly disposed therebetween, the liner having a body-facing surface; an active barrier disposed between the liner and the outer cover, wherein the active barrier is in fluid communication with the absorbent assembly, and wherein the active barrier is adapted to change dimensions when wetted; and a barrier highlight

disposed to overlie the active barrier, wherein the barrier highlight is in fluid communication with the absorbent assembly or the active barrier, and wherein the barrier highlight is configured to change appearance when wetted.

[0007] In another aspect of the present disclosure, a feminine hygiene article for preventing leakage of a liquid insult includes an outer cover, a liner, and an absorbent assembly disposed therebetween, the liner having a body-facing surface, and the article including first and second transverse sides and a longitudinal direction; a first longitudinally-extending active barrier disposed between the liner and the outer cover and adjacent the first transverse side, wherein the active barrier is in fluid communication with the absorbent assembly, and wherein the active barrier is configured to change dimensions when wetted; and a barrier highlight disposed to overlie the active barrier, wherein the barrier highlight is in fluid communication with the absorbent assembly or the active barrier, and wherein the barrier highlight is configured to change appearance when wetted.

[0008] The purposes and features of the present disclosure will be set forth in the description that follows. Additional features of the disclosure can be realized and attained by the product and processes particularly pointed out in the written description and claims hereof, as well as from the appended drawings.

[0009] It is to be understood that both the foregoing general description and the following detailed description are exemplary and are intended to provide further explanation of the disclosure claimed. The accompanying drawings, which are incorporated in and constitute part of this specification, are included to illustrate and provide a further understanding of the disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The present disclosure will be more fully understood, and further features will become apparent, when reference is made to the following detailed description and the accompanying drawings. The drawings are merely representative and are not intended to limit the scope of the claims.

[0011] FIG. 1 representatively illustrates a plan view of a feminine/incontinence pad of the present disclosure showing the surface of the feminine/incontinence pad that faces the wearer when worn, and with portions cut away to show underlying features;

[0012] FIG. 2 representatively illustrates a perspective view of the feminine/incontinence pad of FIG. 1 including barriers;

[0013] FIG. 3 representatively illustrates a plan view of a pair of training pants of the present disclosure showing the surface of the training pants that faces the wearer when worn, and with portions cut away to show underlying features;

[0014] FIG. 4 representatively illustrates a plan view of an adult undergarment of the present disclosure showing the surface of the training pants that faces the wearer when worn, and with portions cut away to show underlying features;

[0015] FIGS. 5A and 5B representatively illustrate a schematic, cutaway, elevation view of a leakage prevention element used in conjunction with any of the articles of FIGS. 1-4;

[0016] FIGS. 6A and 6B representatively illustrate a schematic, cutaway, elevation view of an alternative leakage prevention element used in conjunction with any of the articles of FIGS. 1-4; and